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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/512,124	08/26/2005	Genhong Cheng	02307K-154600US	8432
20350 7590 11/24/2010 TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834				
			EXAMINER DANG, IAN D	
			ART UNIT 1647	PAPER NUMBER
			MAIL DATE 11/24/2010	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/512,124

**Applicant(s)**

CHENG ET AL.

**Examiner**

IAN DANG

**Art Unit**

1647

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,20 and 25-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,20 and 25-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Paper No(s)/Mail Date \_\_\_\_\_
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Upon further consideration, new issues are being raised. Therefore, finality of the previous office action has been withdrawn and prosecution on the merits continues. The final action was mailed 08/26/2010.

#### ***Status of Application, Amendments and/or Claims***

The amendment of 25 October 2010 has been entered in full. Claims 1-4, 6-19, 21-24 have been cancelled and claims 5, 20, 27-31 have been amended.

Claims 5, 20, 25-31 are under examination.

#### ***Rejection Maintained***

Claims 5, 20, 25-31 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method for reducing viral infection and replication of the Murid herpesvirus 68 (MHV68) in a cell in vitro and in vivo comprising contacting the cell with an effective amount of poly I:C to stimulate induction of interferon regulatory factor in the mammalian cell thereby increasing expression of interferon  $\beta$  in the mammalian cell and reducing the viral infection, does not reasonably provide enablement for a method for reducing viral infection and viral replication in a cell in vitro or in vivo or a method of reducing a viral infection in a mammalian cell comprising contacting the cell with an effective amount of poly I:C to stimulate induction of interferon regulatory factor in the mammalian cell thereby increasing expression of interferon  $\beta$  in the mammalian cell and **inhibiting** the viral infection. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Although Applicants have amended claims 5, 20, 27-30 by deleting "inhibiting" and adding "reducing" in the preamble of these claims, claims 5, 20, 25-31 remain rejected under 35 U.S.C. 112, first paragraph, because the term "inhibiting" is still recited in the conclusion of claims 5, 20, and 31. As previously indicated, the term "inhibiting" has been broadly interpreted by the Examiner as meaning that an activity will not occur, i.e. viral infection and viral replication in a cell will not occur. Although the art and the specification do not provide any support or working examples for the complete inhibition or viral infection and viral replication as interpreted by the Examiner, the art and specification provide support and working examples for a reduction in viral infection and viral replication.

### ***New Grounds of Rejection***

#### ***Claim Rejections - 35 USC § 112 (Written Description)***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 5, 20, 25-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 5, 20, 25-31 are drawn to a method for reducing viral infection and viral replication in a cell *in vitro* or *in vivo* comprising contacting the cell with an effective amount of poly I:C to stimulate induction of interferon regulatory factor in the mammalian cell thereby increasing expression of interferon  $\beta$  in the mammalian cell and inhibiting the viral infection.

Although Applicant discloses the viral infection by the virus Murid herpesvirus 68 (MHV68) (see declaration filed 01/26/2010), Applicant has not provided any information regarding the identifying characteristics of the viral infection or replication that can be reduced in a mammalian cell by contacting a cell with an effective amount of poly I:C. The specification and the recitation the claims fail to disclose any identifying characteristics of the viral infection or replication that can be reduced in a mammalian cell by administering an effective amount of poly I:C.

Therefore, Applicant has not satisfied the requirement for written description because the claimed viral infection or replication recited in claims 5, 20, and 31 encompass a genus of infection or replication by a large number of virus, which includes influenza virus, Baculovirus or retrovirus, whose identifying characteristic is not described. The specification provides the viral infection by the MHV68 as an example for a viral infection, but it does not provide any description of the special features for the claimed viral infection or replication that can be reduced in a mammalian cell by contacting a cell with an effective amount of poly I:C. Furthermore, the specification does not provide any teachings sufficient to one of skill in the art to identify the numerous different viral infections encompassed by the claims. Thus, Applicants have not provided any identifying characteristics or properties of the instant viral infection or replication such that one of skill would be able to predictably identify the encompassed viral infection or replication of the instant claims.

Based on Applicants' disclosure and knowledge within the art, those of skill in the art would conclude that Applicants would not have been in possession of the claimed genus of viral infection or replication based on the disclosure of the species of viral infection by the virus MHV68 and relevant identifying characteristics. Thus, applicant was not in possession of the claimed genus of viral infection or replication and the written description requirement is not satisfied.

### **Conclusion**

No claim is allowed.

### **Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IAN DANG whose telephone number is (571)272-5014. The examiner can normally be reached on Monday-Friday from 10am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Stucker can be reached on (571) 272-0911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1647

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner Dang  
AU 1647  
November 19, 2010

/Robert Landsman/  
Primary Examiner, Art Unit 1647